



# CSR Advisory Council Update

March 29, 2021

Noni Byrnes, Ph.D.  
Director  
Center for Scientific Review

# Welcome: CSR Advisory Council Members



Jinming Gao, Ph.D.

Elaine Dewey Sammons Distinguished  
Chair in Cancer

Harold C. Simmons Comprehensive  
Cancer Center

University of Texas Southwestern Medical  
Center



Scott Miller, Ph.D.

Irénée du Pont Professor of Chemistry  
Chemistry

Yale University



Julie Price, Ph.D.

Professor and Investigator  
Radiology and Biomedical Imaging  
Harvard Medical School



Alfred George, M.D.

Magerstadt Professor and Chair  
Pharmacology

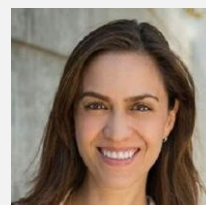
Northwestern University



Tonya Palermo, Ph.D.

Professor And Associate Director  
Center for Child Health, Behavior and  
Development

University of Washington



Elizabeth Villa, Ph.D.

Assistant Professor  
Section of Molecular Biology  
Division of Biological Sciences  
University of California, San Diego



Deanna Kroetz, Ph.D.

Jere E. Goyan Presidential Professor for the  
Advancement of Pharmacy

Bioengineering and Therapeutic Sciences  
University of California, San Francisco



Mark Peifer, Ph.D.

Michael Hooker Distinguished Professor  
Biology

University of North Carolina, Chapel Hill



Denise Wilfley, Ph.D.

Scott Rudolph University Professor  
Psychiatry, Pediatrics, Psychological and  
Brain Sciences

Washington University at St. Louis

# Welcome...CSR Advisory Council Ad Hocs



**Leopoldo Cabassa, Ph.D.**

Associate Professor  
Brown School of Social Work  
Washington University, St Louis



**Matthew Carpenter, Ph.D.**

Professor  
Department of Psychiatry and Behavioral Sciences  
Medical University of South Carolina



**Christine Hendon, Ph.D.**

Associate Professor  
Department of Electrical Engineering  
Columbia University



**Michelle Janelins, Ph.D.**

Associate Professor  
Department of Surgery, Cancer Control (SMD)  
University of Rochester Medical Center



**Narasimhan Rajaram, Ph.D.**

Associate Professor  
Department of Biomedical Engineering  
University of Arkansas at Fayetteville

# Scientific Leadership/Management Transitions [Since Sept 2020]

## DRR



**Deputy Director**  
**Division of Receipt and Referral**  
B. Duane Price



**Assistant Director**  
**Division of Receipt and Referral**  
Marc Boulay

## Acting IRG Chiefs



Jacinta Bronte-Tinkew



Ben Shapero



Gagan Pandya



Jessica Smith

## IRG Chiefs



**IRG Chief**  
**Musculoskeletal, Oral and Skin Sciences**  
Chee Chew Lim



**IRG Chief**  
**Oncology-Translational Clinical 1 (OTC 1)**  
Lambratu (Bree) Rahman Sesay



**CSR Training Coordinator (New SROs)**  
Vanessa Boyce

## Retiring



**IRG Chief**  
**Risk, Prevention and Health Behavior**  
Weijia Ni

# NIH's Two-Stage Peer Review System

1

First Level of Review  
Study Section or SEP  
(Majority at CSR)

Evaluation of **scientific merit**

2

Second Level of Review  
Advisory Council  
(Institute/Center)

Recommendation for funding, based on  
**scientific merit, programmatic priorities,**  
**administrative considerations**





# CSR's Mission




Center for  
Scientific Review


To ensure that NIH grant applications receive fair, independent, expert, and timely **scientific** reviews - free from inappropriate influences - so NIH can fund the most promising research.

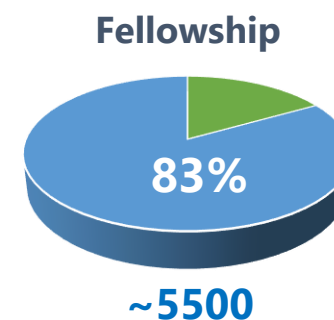
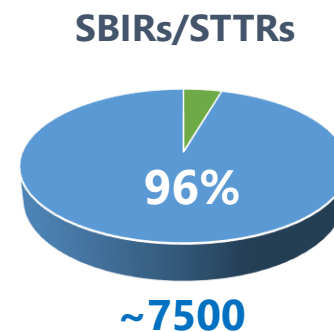
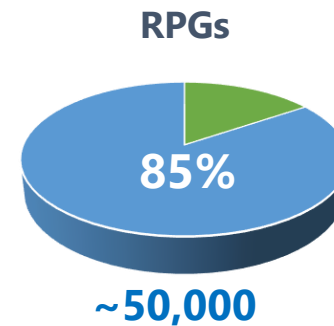
# CSR's Scope

  
**~85,000**  
NIH applications



  
**~250**  
Scientific Review  
Officers

  
**>18,000**  
Distinct Reviewers



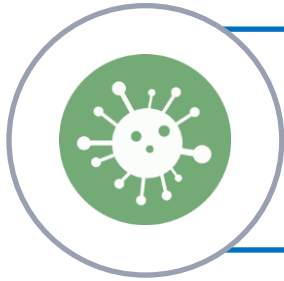
Plus...

## A Variety of Special Initiatives

*A few examples:*

- HEAL
- INCLUDE
- BRAIN
- All-of-Us
- FIRST
- MIRA
- COMMON FUND HRHR
- RADX PREVAIL
- DSI AFRICA

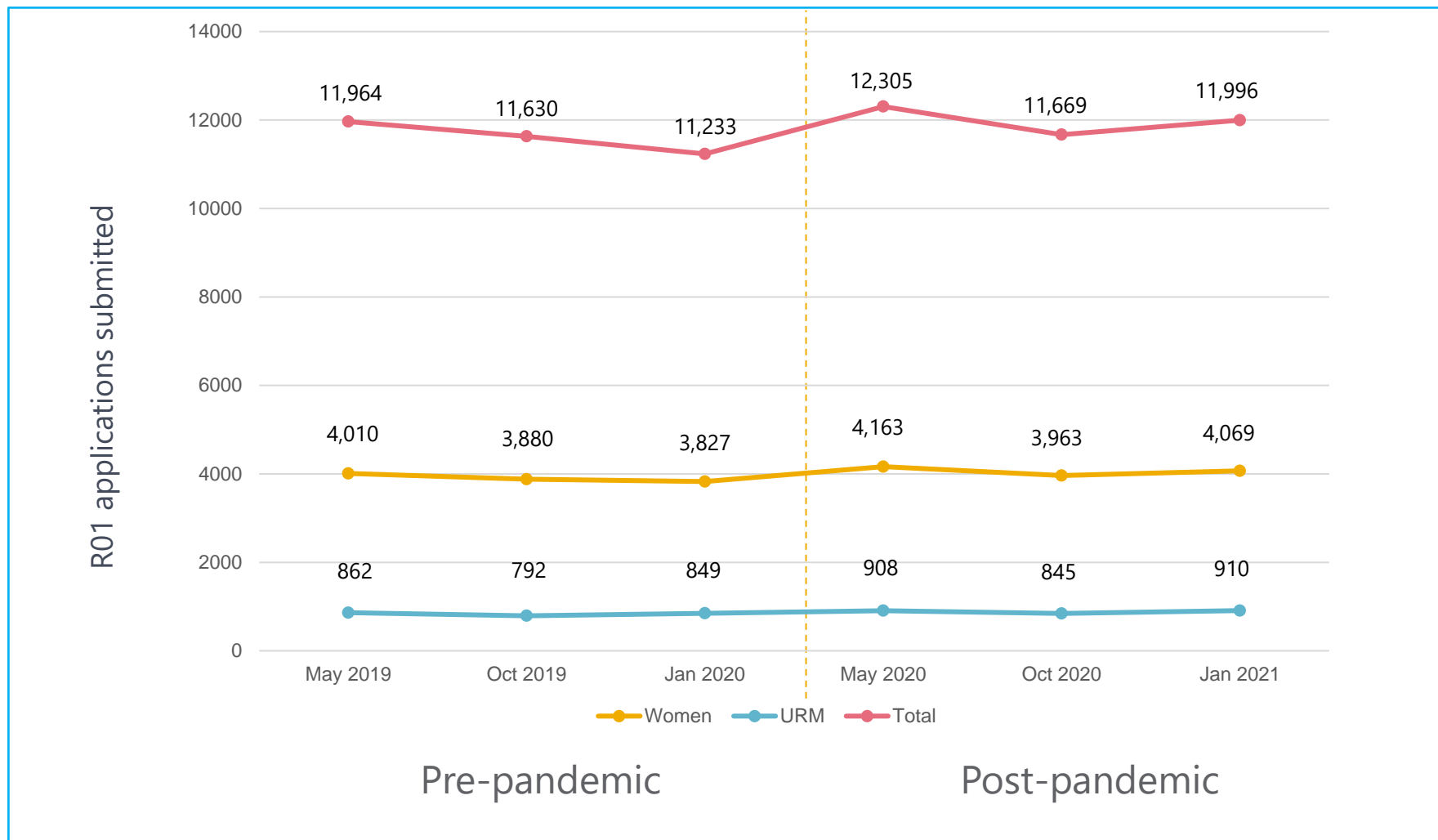
*And much more....*



# Impact of Covid-19 on Peer Review



# R01 Submissions [May 2019 – Jan 2021 Council Rounds]



# CSR Zoom Surveys – After Jun/Jul 2020, and Feb/Mar 2021

“Compared to your usual in-person meeting....”

## Personal Experience

- Did **you contribute to discussion** more or less?
- Were you **confident voicing opinions**?
- Were **others responsive** to your feedback?
- Could you **clearly communicate your opinions**?
- Were you **comfortable voting outside the range**?
- How did your **attention span** compare?



## Impressions of the Meeting

- Were the **discussions productive**?
- What was the level of **reviewer engagement**?
- How did **meeting management** compare?
- What was the **overall quality of review**?

Much worse

Slightly worse

Same

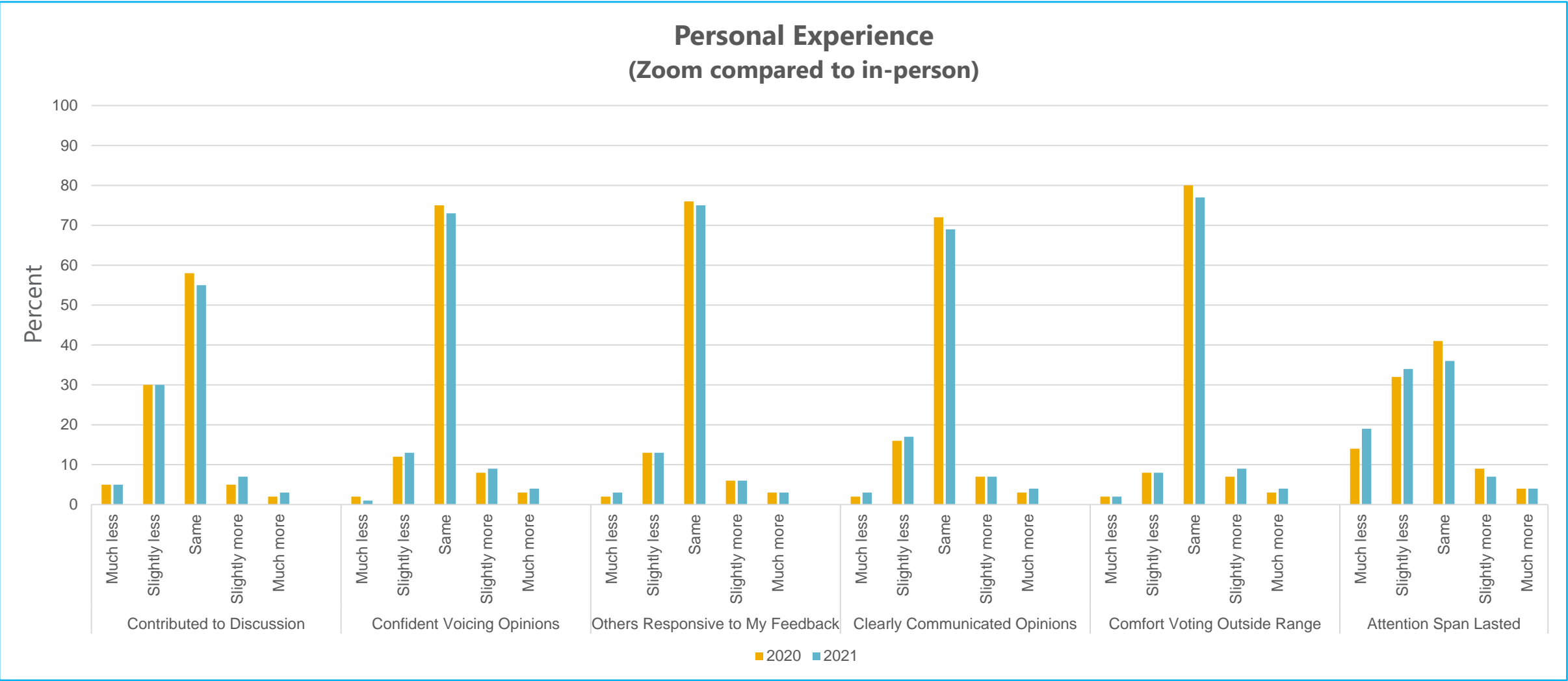
Slightly better

Much better



# Post-Zoom Meeting Reviewer Surveys: Jun/Jul 2020 vs Feb/Mar 2021

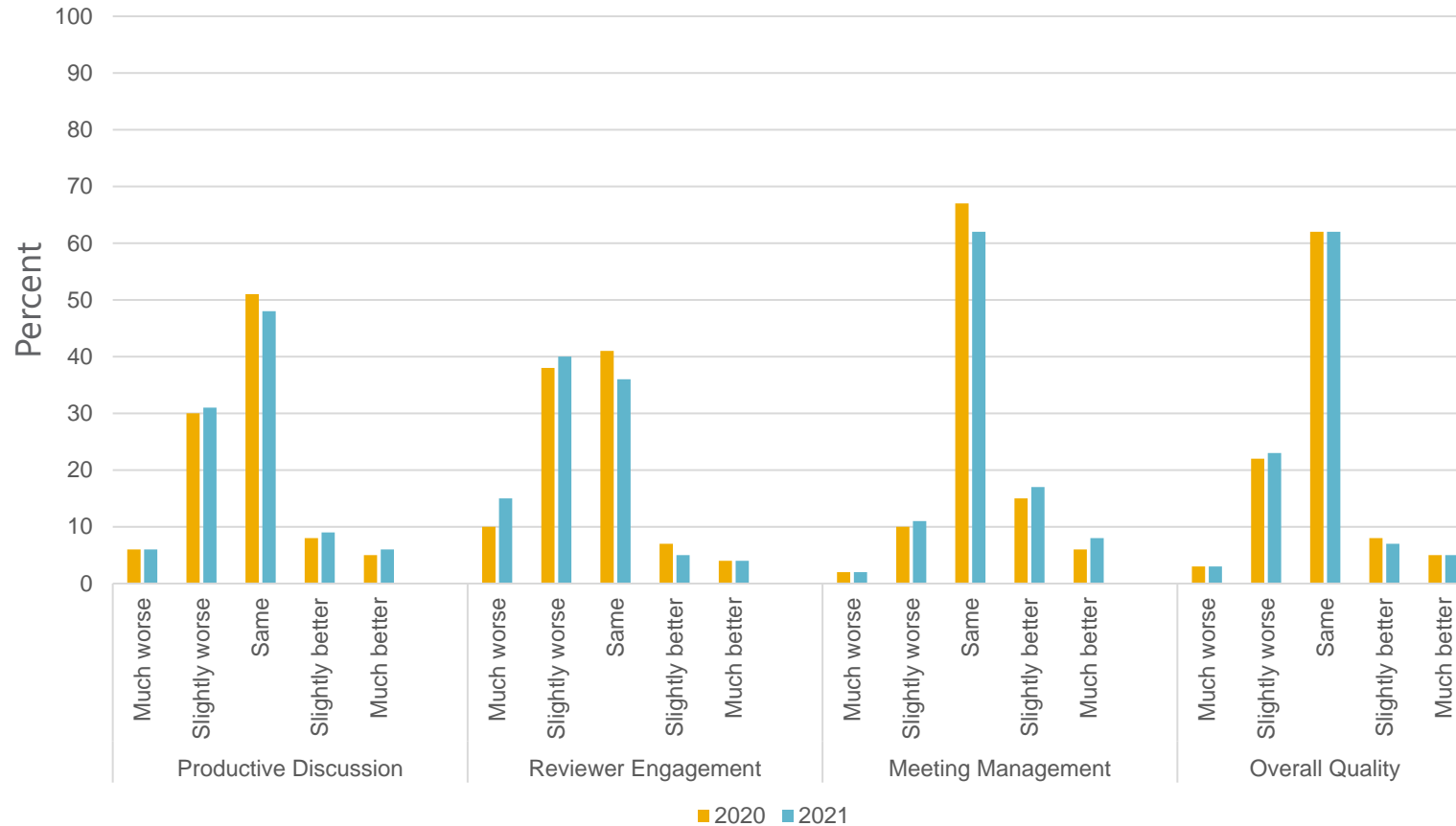
## No Significant Change



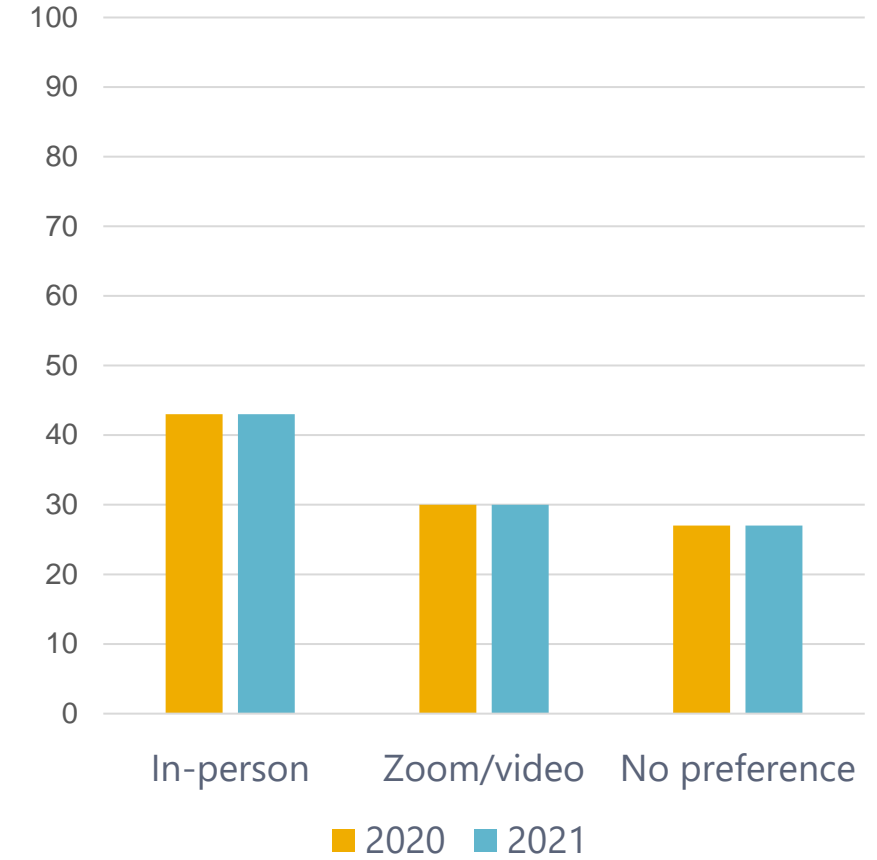
# Post-Zoom Meeting Reviewer Surveys: Jun/Jul 2020 vs Feb/Mar 2021

## No Significant Change

**Impressions of Meeting**  
(Zoom compared to in-person)

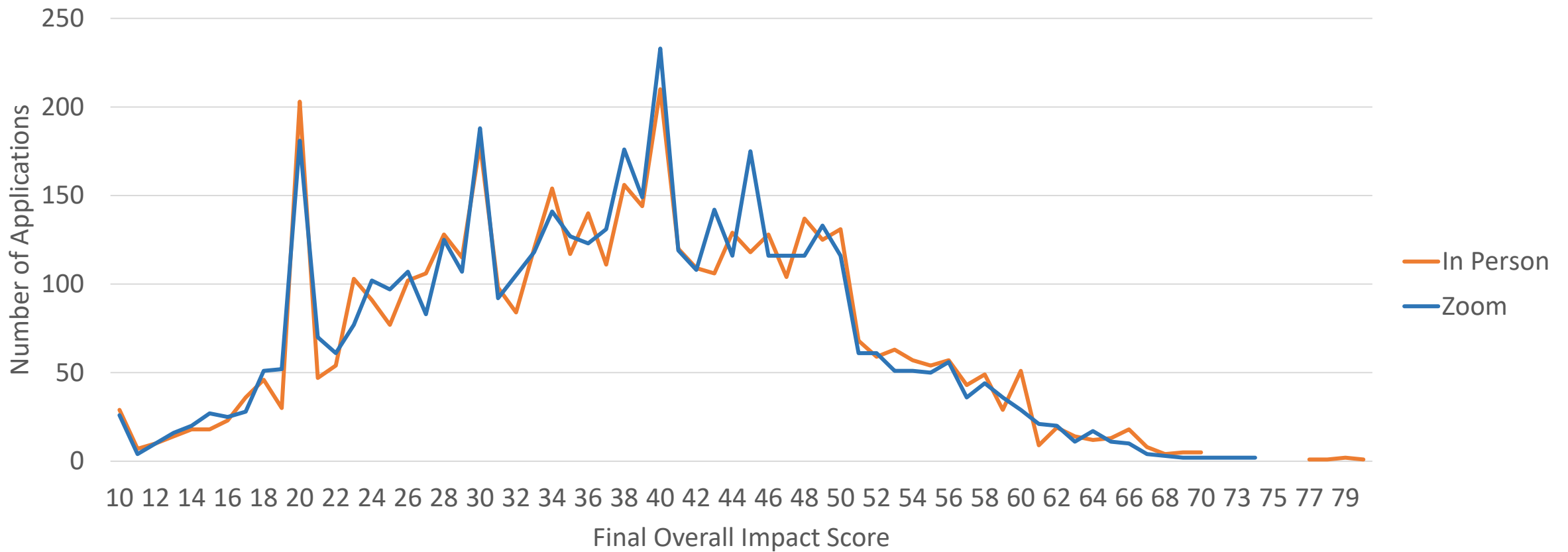


**Format Preference**  
(Zoom compared to in-person)



# Score Distributions – No Significant Change

## 2020 Data





# Out of Range Scoring – No Significant Change

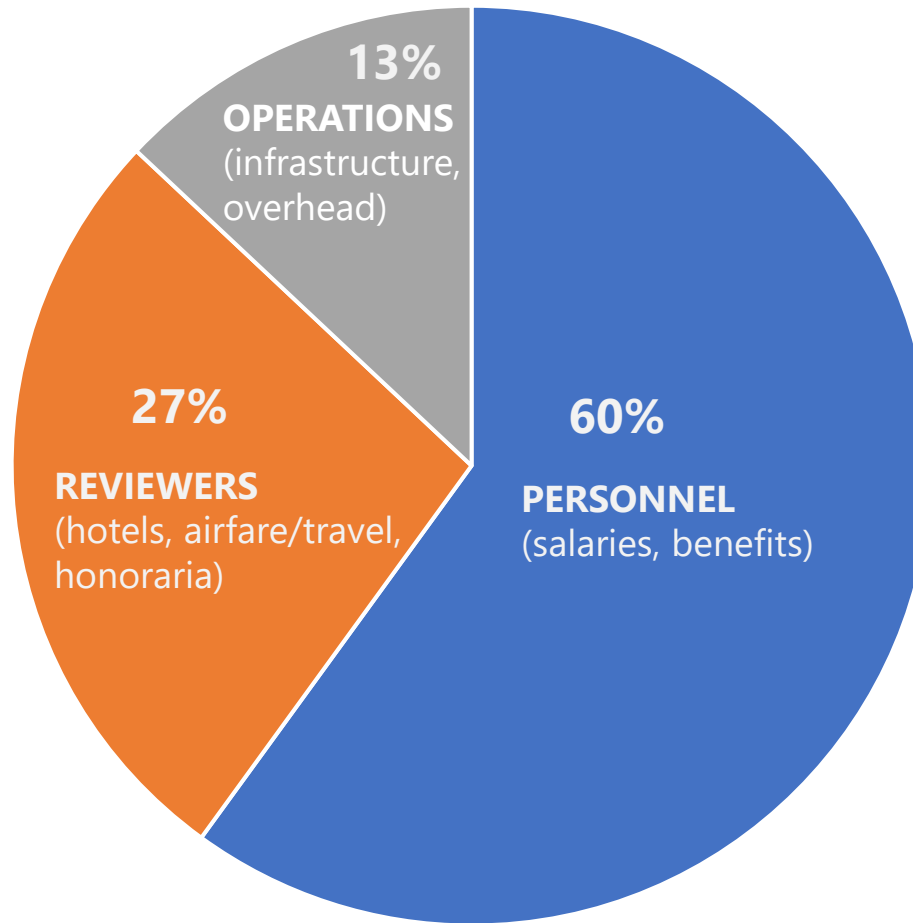
## 2020 Data

Meeting Type	Standing Study Sections		All Meetings	
Council	In Person	Zoom	In Person	Zoom
N of scores	107,477	111,713	135,069	143,340
% of scores out of range	2.7%	2.7%	3.6%	3.6%

# The Effect of COVID-19 on CSR's Budget

\$141M (FY20 allocation)

<0.4% of NIH's \$42B (FY20)



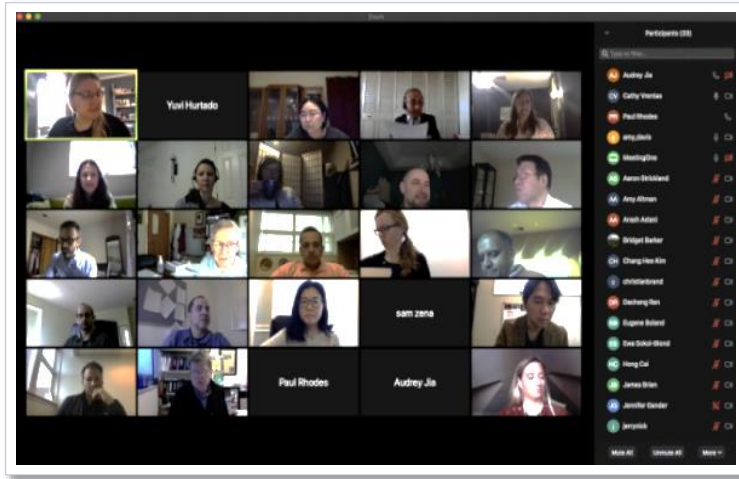
**CSR savings:** hotel contracts, airfare, reviewer travel, staff travel

**CSR costs:** more meeting days, Zoom licenses, IT security, equipment for 100% staff telework

**Net CSR surplus:** ~\$22M

*All returned to the NIH [Clinical Center, IT security]*

# Post-pandemic: Future of peer review meetings?



- **Balance** – fiscal, environmental, convenience, time-savings versus group cohesion, reviewer attention span, reviewer preference, networking opportunities, especially for junior faculty
- **Mix of virtual and in-person** (1-2x per year in-person)
- Continue to apply the **best practices for virtual formats** that we've been able to develop during this forced experiment.

In my NIH study section instructions, "interruptions from kids and pets are just part of our reality these days, and we welcome these cameos." Thank you, @CSRpeerreview, for normalizing these pandemic challenges!



In NIH **study section** pre-meeting **zoom** notes:  
"Kids, pets, loved ones (but with caveat above [confidentiality is maintained]) are OK! No need to sequester yourself from your family."

Wow, thanks NIH and SRO!



19



# NIH's UNITE Initiative

## U N I T E

### NIH's Commitment to Ending Structural Racism

- NIH is committed to instituting new ways to support diversity, equity, and inclusion, and identifying and dismantling any policies and practices that may harm our workforce and our science.
- NIH established the **UNITE** initiative to address structural racism in biomedical research with the goal of ending racial inequity.
- Primary goals of the initiative are:
  - U** Understanding stakeholder experiences through listening and learning
  - N** New research on health disparities, minority health, and health equities
  - I** Improving the NIH culture and structure for equity, inclusion and excellence
  - T** Transparency, communication, and accountability with our internal and external stakeholders
  - E** Extramural research ecosystem: changing policy, culture and structure to promote workforce diversity



[nih.gov/ending-structural-racism](https://nih.gov/ending-structural-racism)



# Two Examples of New NIH-wide Initiatives

## Faculty Institutional Recruitment for Sustainable Transformation (FIRST)

Common Fund » Common Fund Programs » Faculty Institutional Recruitment for Sustainable Transformation (FIRST)

### Faculty Institutional Recruitment for Sustainable Transformation (FIRST)

Funding Opportunities

Funding FAQs

NIH Working Group

### New Funding Opportunities Published

[Read More](#)

### Program Snapshot

The NIH Common Fund's **Faculty Institutional Recruitment for Sustainable Transformation (FIRST)** program aims to enhance and maintain cultures of inclusive excellence in the biomedical research community. "Inclusive excellence" refers to cultures that establish and sustain scientific environments that cultivate and benefit from a full range of talent. NIH aims to facilitate institutions in their building a self-reinforcing community of scientists, through recruitment of a critical mass of early-career faculty who have a demonstrated commitment to inclusive excellence. The program also seeks to have a positive impact on faculty development, retention, progression, and eventual promotion, as well as develop inclusive environments that are sustainable.

## Two new funding opportunities from the NIH Common Fund's Transformative Health Disparities Research initiative

Transformative Research to Address Health Disparities and Advance Health Equity at Minority Serving Institutions

Transformative Research to Address Health Disparities and Advance Health Equity

### Applications due by Friday, May 28, 2021



# A Fair and Rigorous Evaluation of Scientific Merit Requires Equity, Diversity, and Inclusion in the Review Process

- Direct Reporting of Bias in Review
- Bias Awareness Training for Reviewers and Staff
- Diversifying Review Panels
- Blinded Reviews: Decouple Science from Investigator/Environment
- CSR's Workforce Diversity

## Review Matters

### CSR's Commitment to Advancing Equity, Diversity and Inclusion in Peer Review



Noni Byrnes  
Director  
March 3, 2021

On March 1, NIH Director Francis Collins [announced](#) NIH's broad-based initiative, [UNITE](#), to end structural racism and racial inequities in biomedical science. This is a recognition of the need for urgent, sustained effort on many fronts across the research enterprise, including in all parts of the NIH's extramural processes, to change culture. While the NIH Institutes and Centers will examine their programmatic priorities and discretionary funding practices, here at CSR, we are committed to pushing ahead with efforts to protect the peer review process from the systemic biases that exist in all areas of the scientific community.

In the [June 2020 Review Matters blog](#), I wrote about some of the steps that CSR is taking to address individual and systemic biases in peer review. Following that, in July 2020, we held three community listening sessions, in which we heard the rightful anger and the call for urgent and specific action around the persistent funding disparity for Black investigators. I shared the [report and recommendations](#) from those forums with NIH leadership, with the [UNITE E](#) group that is focused on extramural changes, as well as with our own CSR Advisory Council. Since then, I have held a number of individual and small group conversations with investigators, who shared their personal experiences of bias as an applicant or reviewer, which has helped us further refine the strategies we were already pursuing, as well as develop some new approaches. Below are a few of the actions we are taking:

- **Reporting:** Many of you asked for a way to report concerns regarding bias in the peer review process directly to CSR management. Our Associate Director for Diversity & Workforce Development, [Dr. Gabriel Fosu](#), will serve as a reporting avenue for any concerns around fairness in review. Dr. Fosu reports directly to me and I will see all reports. Beginning on March 15, all CSR scientific review officers (SROs) and staff will provide this information in their email signature lines. To report concerns around fairness in review: [G.Fosu\\_AssocDir@csr.nih.gov](mailto:G.Fosu_AssocDir@csr.nih.gov).
- **"Bias awareness in review" training for SROs, Reviewers, Chairs:** Despite a brief interruption due to an executive order that has since been rescinded, we are forging ahead with the development of an interactive training module on bias. It will include a range of nuanced case studies to raise awareness of potential biases and mitigation strategies and tools for bystanders. We plan to launch the training for all CSR reviewers, chairs and SROs in August 2021.

# Direct Reporting Avenue for Extramural Community

Based on requests from community (at listening sessions and more)

- **Direct Reporting of Bias in Review**
- Bias Awareness Training for Reviewers and Staff
- Diversifying Reviewers
- Blinded Reviews: Decouple Science from Investigator/Environment
- CSR's Workforce Diversity

For issues related to respectful interactions, bias or anything else that could affect the fairness of the review process, contact your SRO or the CSR Associate Director of Diversity & Workforce Development at [G.Fosu\\_AssocDir@csr.nih.gov](mailto:G.Fosu_AssocDir@csr.nih.gov).



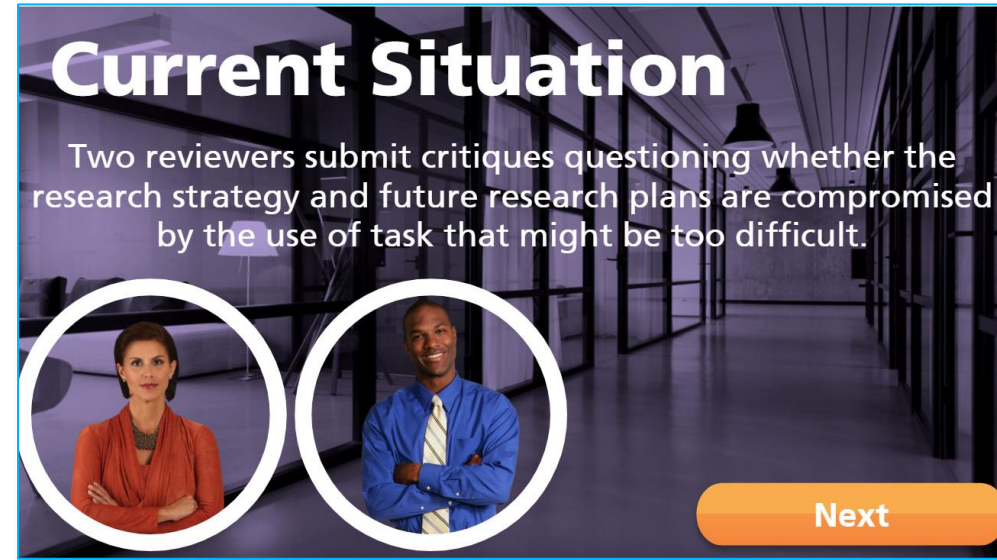
Gabriel Fosu, Ph.D.

- On every outgoing staff email
- On CSR's web page
- On every study section page

# Multi-media, Interactive Bias Training for Reviewers, SROs

Planned Launch: Fall 2021

- Direct Reporting of Bias in Review
- **Bias Awareness Training for Reviewers and Staff**
- Diversifying Review Panels
- Blinded Reviews: Decouple Science from Investigator/Environment
- **CSR's Workforce Diversity**



- Bias (including positive bias) awareness
- Case studies in review
- Mitigation and bystander strategies in review

# CSR Advisory Council Working Group: Bias Awareness Training Module Development

## CSR AC Members



**Scott Miller, Ph.D.**  
Yale University



**Julie Price, Ph.D.**  
Harvard Medical School



**Narasimhan Rajaram, Ph.D.**  
University of Arkansas at  
Fayetteville

## Working Group Ad Hocs



**Doug Andres, Ph.D.**  
University of Kentucky



**Derek Applewhite, Ph.D.**  
Reed College



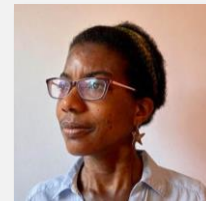
**Markus Brauer, Ph.D.**  
University of  
Wisconsin-Madison



**Elizabeth Cosgriff-Hernandez,  
Ph.D.**  
University of Texas, Austin



**Carlos Crespo, Ph.D.**  
Portland State  
University



**Karine Gibbs, Ph.D.**  
University of California,  
Berkeley



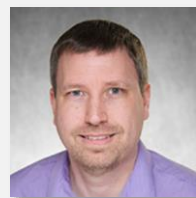
**Xuemei Huang, Ph.D.**  
Pennsylvania State  
University



**Rakale Quarells, Ph.D.**  
Morehouse College



**Germán Rosas-Acosta, Ph.D.**  
University of Texas at El Paso



**Steve Varga, Ph.D.**  
University of Iowa

## NIH Staff



**Hope Cummings, Ph.D.**  
CSR



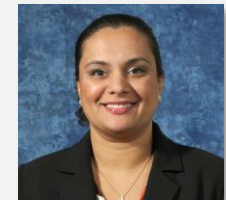
**Kristin Kramer, Ph.D.**  
CSR



**Charlene Le Fauve, Ph.D.**  
NIH Off. of Sci.  
Workforce Diversity



**Michael Sesma, Ph.D.**  
NIGMS



**Tasmeen Weik, Ph.D.**  
CSR

# Diversifying Review Panels

- Direct Reporting of Bias in Review
- Bias Awareness Training for Reviewers and Staff
- **Diversifying Review Panels**
- Blinded Reviews: Decouple Science from Investigator/Environment
- **CSR's Workforce Diversity**

	%F	%URM	%B/AA
	2020	2020	2020
<b>CSR Applicants</b>	35.0%	8.5%	2.5%
<b>Study Section Members</b>	43.0%	13.0%	4.3%
<b>All Reviewers</b>	38.5%	8.5%	2.5%

- Raising collective awareness, setting expectations, sharing panel-level data with management/staff, oversight
- Providing tools for SROs to find “lesser-known” qualified reviewers, building up database sources [Reviewer Finder]
- SRO training, esp. SRO-to-SRO sharing of best practices in broader recruitment strategies



# Exploring Blinded Review Processes

## Common Fund Transformative R01 Program

- Direct Reporting of Bias in Review
- Bias Awareness Training for Reviewers and Staff
- Diversifying Review Panels
- **Blinded Reviews: Decouple Science from Investigator/Environment**
- CSR's Workforce Diversity

No identifiers (Abstract/Aims/Research Plan only):

- Stage 1: **Editorial Board** selects top subset
- Stage 2: **Subject matter experts** assess
- Stage 3: **Editorial Board** gives preliminary scores, sets discussion order

Identifiers provided (Investigator/Institution)

- Study Section Meeting with discussion and final scores of all 5 criteria.



**Ongoing: Study Section Meeting April 2021, evaluation of process by external contractor**

# Decouple Science from Investigator/Environment

## CSRAC Working Groups' recommendations of decoupled "factors" open the door...

- Direct Reporting of Bias in Review
- Bias Awareness Training for Reviewers and Staff
- Diversifying Review Panels
- **Blinded Reviews: Decouple Science from Investigator/Environment**
- CSR's Workforce Diversity

### CSR Advisory Council Workgroup: Simplifying Review Criteria for Clinical Trials

Bruce Reed, PhD  
Deputy Director  
Center for Scientific Review

Tonya Palermo, PhD  
Professor of Anesthesiology,  
Pediatrics, and Psychiatry  
University of Washington

U.S. Department of Health & Human Services



### CSR Advisory Council Workgroup: Simplifying Review Criteria

Bruce Reed, PhD  
Deputy Director  
Center for Scientific Review

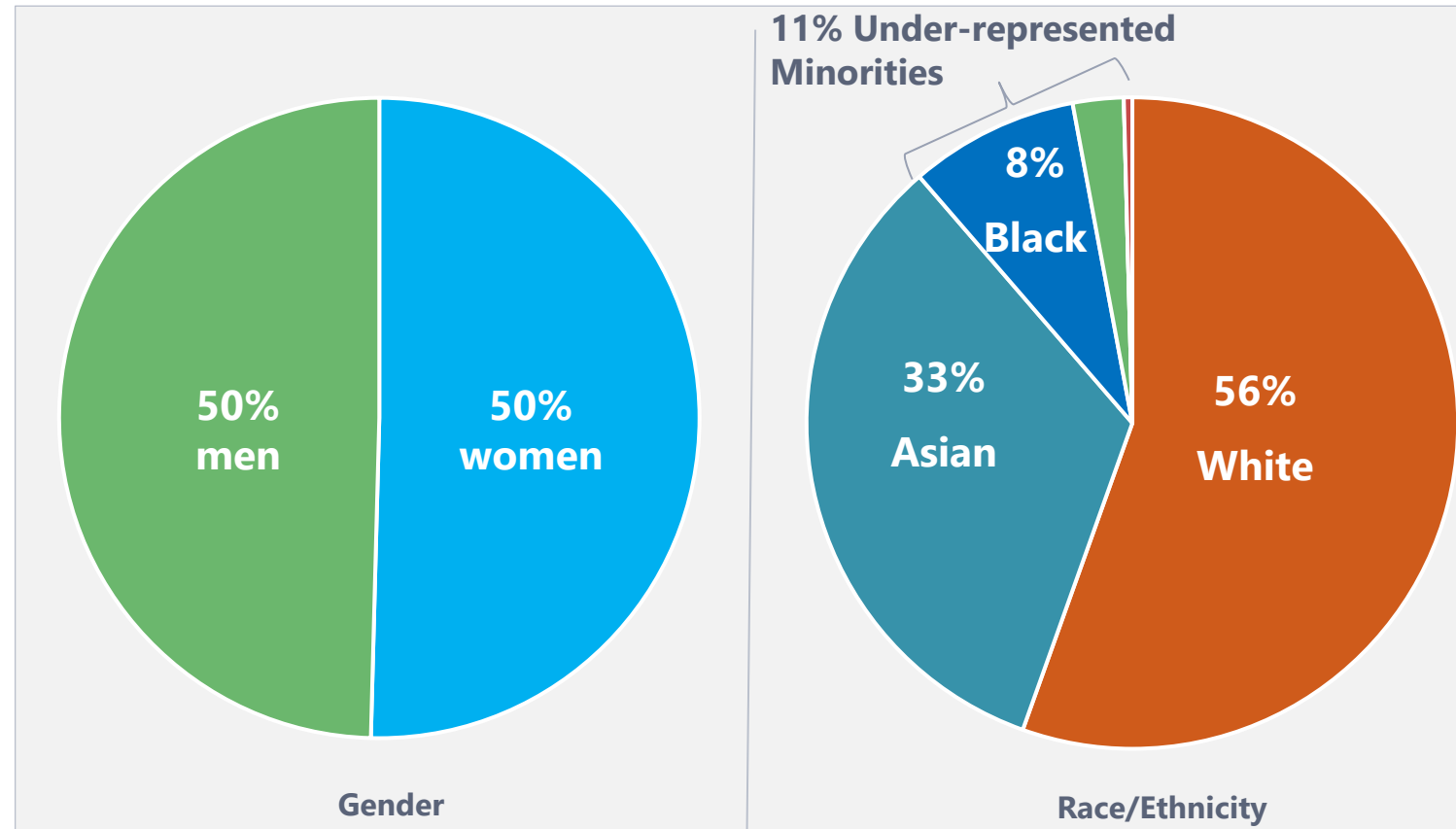
Tonya Palermo, PhD  
Professor of Anesthesiology,  
Pediatrics, and Psychiatry  
University of Washington

March 30, 2020

# CSR's Workforce Diversity

## CSR SROs [Sept 2020]

- Direct Reporting of Bias in Review
- Bias Awareness Training for Reviewers and Staff
- Diversifying Review Panels
- Blinded Reviews: Decouple Science from Investigator/Environment
- **CSR's Workforce Diversity**

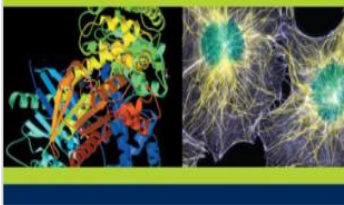




## **Some Additional News**

# New Chartered Study Sections for NIGMS MIRA

## Maximizing Investigators' Research Award for New and Early Stage Investigators (R35)



Three new study sections have been chartered to begin this summer 2021

- **Maximizing Investigators' Research Award – A Study Section (MRAA):** Genomics, molecular genetics, and prokaryotic cell biology
- **Maximizing Investigators' Research Award – B Study Section (MRAB):** Biochemistry, chemical biology, chemistry, molecular biophysics and bioengineering
- **Maximizing Investigators' Research Award – C Study Section (MRAC):** Cell biology and clinical/translational studies in NIGMS-supported areas (e.g., pharmacology, wound healing)



# Continuation of ENQUIRE (Evaluating Panel Quality in Review)

## Process Overview for Each Cluster of Study Sections

- ▼ **Cluster Formation**  
**How?** Determined by science, not management structure - 9-12 study sections in each cluster
- ▼ **External Scientific Evaluation Panel**  
**Who?** Scientifically broad, senior scientists provided with:
  - current scientific guidelines
  - sample abstracts & aims
  - data on workload trends, bibliometric output, ESI submission and success rates**Asked:** How well does the scope of the study sections align with the current state of the science?
- ▼ **Internal Process Evaluation Panel**  
**Who?** NIH extramural staff with broad perspective
  - workload data
  - scoring trends
  - survey feedback from reviewers & program officers
  - site-visit information on meeting function
  - External Scientific Working Group's report**Asked:** Does the study section function in a way that supports optimal identification of high-impact science?
- ▼ **Approvals**
  - CSR Advisory Council
  - NIH Office of the Director
- ▼ **Implementation by CSR**
  - Test practicality of new guidelines through mock application referral
  - Reassignment of standing study section members to fit guidelines of new study sections
  - Publicize new study sections to the community
  - Monitor referral & adherence to new guidelines

### Completed:

- Healthcare Delivery/Patient Outcomes (11)
- GI, Renal, Endocrine Systems (10)
- Cardiac, Vascular and Hematologic Sciences (8)
- Functional/Cognitive Neuroscience (11)

### Ongoing:

- Basic Cellular/Molecular (16)
- Oncology and Cancer Biology (11)

### Upcoming:

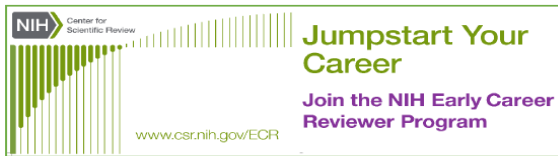
- Epidemiology and Population Sciences (10)
- Drug Design/Delivery (13)

# Targeted Outreach

## Webinars

### NIH Grants 101 and Early Career Reviewer (ECR) Program Webinar

Hosted by the National Institutes of Health (NIH)  
Center for Scientific Review (CSR)



Wednesday April 14, 2021  
2:00PM Eastern

Register for the webinar [here](#).



### Peer Review Basics & the Review of Community-Based Research at CSR

Jacinta Bronte-Tinkew, PhD  
Lauren Fordyce, PhD  
Tasmeen Weik, DrPH, MPH  
Center for Scientific Review  
National Institutes of Health

## Mock study sections



## SBIR outreach



Center for Scientific Review @CSRpeerreview · Mar 24  
We'll have SROs there to meet with people 1:1 - come with your questions!



Extramural Research @NIHgrants · Mar 24  
New to the NIH small business grant programs? \$  
Make plans today to learn how to apply for seed funding to support your early-stage biomedical research and grow your small business at this FREE virtual conference on April 26-30. @nihseed  
sbir.nih.gov/resources/even...



## Peer review basics & early career reviewer

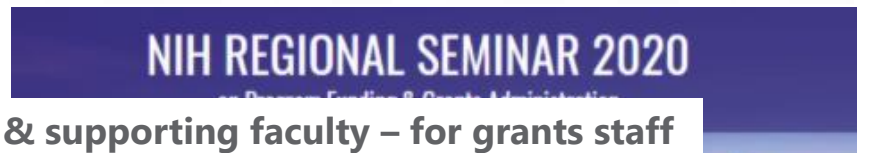
AACPDM  
**74TH  
ANNUAL  
MEETING**

**Now Virtual!**

September 23-26, 2020:  
Live Virtual Meeting



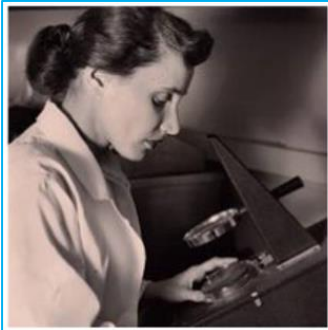
## 13th Annual Conference on the Science of Dissemination and Implementation in Health



Navigating the NIH & supporting faculty – for grants staff



# Up Next....

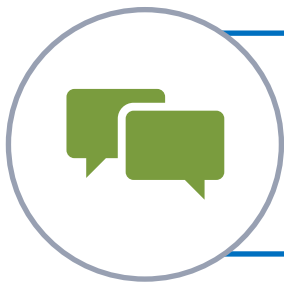


Ruth L. Kirschstein  
National Research Service Awards



National Institutes of Health  
Research Training and Career Development

***Improving the Fellowship Peer Review Process***



## Discussion